

# The Builder.

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**B**Y leading the attention of architects, builders, and others engaged in the arrangement and construction of dwelling-houses and public edifices, and the disposition of land for building on, to sanitary requirements,—bringing before them all sensible suggestions for the improvement of towns, the prevention of disease, and the elevation of homes, which may be made, we hope, ultimately, to conquer routine, to root out the “that will do” and the “near enough” feeling, and so obtain the earnest aid of those who not merely *may* do so much, but *must* do so much, in this respect, before any great advances can be made,—advantages may be obtained, with scarcely any increase of cost, if provided for during the erection of a building, which could not afterwards be had without considerable outlay and inconvenience. The public, of all classes, it may be expected, will presently demand, in their residences, improvements, as their vital importance becomes generally felt, and avoid localities or circumstances known to be dangerous,—and even now would give the preference to houses displaying improved arrangements, and select towns for residence in which wise provision had been made.

A report which has recently been presented to the “Health Committee of Liverpool,” on the sewerage and other works there, by the borough engineer (Mr. Newlands), now before us, contains much that may be usefully considered by those who are engaged in the improvement of towns. We may allude to a few distinct points. The writer urges, very properly, the importance of an abundant supply of water, as well for flushing\* the drains and sewers as for washing all impurities from the surface of streets, and extinguishing fires. For this latter purpose the apparatus should be readily distinguishable night and day, and always ready for use without any appliances which may be mislaid or forgotten at the very instant they are needed. With this view he says—

“I propose that several lamp-posts in each street should be made receptacles for the water apparatus, the pedestal being made of a size sufficient to contain it. In each lamp-pedestal I propose that an upright hydrant be fixed, with a coil of hose, sufficient for washing the streets, or filling the watering carts, constantly attached. The cock-box I would fix in the footway, always on the same side of the lamp-posts, and at a constant distance from them. In the event of a fire, the firemen’s hose would be instantly attached to the hose of the stand-pipe by a coupling screw. The pedestals for the water-apparatus being square, and those for the common lamps being round, would point out at once the place of the water-apparatus; and, if necessary, the side panes of such lamps might be of coloured glass, as a still greater distinctive mark by night. Every superintendent of scavengers and every fireman would be provided with a key to the door of the pedestal, and in the pedestal the key of the cock would constantly remain: thus there

would be no delay in using the water for any purpose. In places where lamp-posts are not required, the pedestals merely might be used, and these might also be used as guard posts at the entrance to narrow streets.”

The lamp irons thus made prominent, might, he thinks, be rendered still more useful by a label attached to their tops. On these would be cast the names of the streets (as at Edinburgh, we may add), and on the centre panel the distance in miles and furlongs from the Exchange. Coach and car fares might be thus regulated. On the plinths, too, would be made the permanent bench-marks necessary under the Act, with their height above the dock-sill expressed in feet and decimal parts. By these means, the simple lamp-post might be made a very useful as well as a very ornamental object.

He adverts to the necessity for the authorities having a servitude over land laid out for building purposes, so as to control the directions of the streets and the proportionate extent covered. Although it may be argued that such interference is unjust, reflection will shew that it is not so. Streets and houses are daily set out with such disregard to health, as to invite disease; and who can calculate the cost which an individual may thus entail upon a town? The public should be protected from this, and now will be.

All extensions should be made in accordance with a fixed plan, and with a view to improvement in the direction and width of streets.

“One fundamental principle in designing additions to a town should never be lost sight of,—that the temporary should give place to the permanent. How often do we see tortuous and narrow streets constructed for no other reason than that the road already existed; and new streets daily spring up around us which have their directions, aspects, and levels determined by the existing country roads from which they have access. Let the town be modelled, therefore, on the best principles, as the permanent subject; the country will adapt itself to the town in so far as the means of obtaining access are concerned.”

Space, light, and ventilation, are of the utmost importance in our towns, and in our houses. In the towns we should endeavour to secure them by a proper width of streets, by public walks, gardens, and parks,—and in our houses, by their form and arrangement.

“That there should be a relation betwixt the width of streets, and the height of the houses on each side, is self-evident. The minimum width of streets in towns should be fixed by considerations of health, and not of traffic; and the relative height of the houses should be such as to admit radiant light and air to the street for the greater part of the day. When the houses are in height equal to about two-thirds of the width of the street, this will be ensured. Conversely, if houses are two stories high above the street, and few houses less than two stories in height are built, the minimum width of a street will be found to be 40 feet. To ensure perfect ventilation, every street should be straight, or should form a portion of a simple curve, without bends, turnings, or projections beyond the general line. There should be no back passage of less width than 10 feet, to allow room for a dust-cart, and these passages should, like the streets, be free from bends or projections.”

After remarking that probably there is no contrivance by which the health of the town is so much depreciated as by the structural monstrosities called *courts*, he says, *courts*, if constructed on proper principles, would be convenient, healthy, and economical. Here, however, we differ from him: against courts of all sorts we wage continual war. What the writer afterwards describes as his improved court—namely, an arrangement of buildings forming three sides of a square, of ample area,

with a common kitchen in the midst—we do not call a court; but even here we should prefer two entrances: for perfect ventilation they are most desirable, to say nothing of other advantages attending a way through.

For warming and ventilating houses for the working classes, he gives a plan wherein—

“The back of the fire-place in each living room is formed of a slab of fire-brick, and an opening is left between the contiguous backs, communicating with the external air by a flue carried under the level of the floor. The air in passing these fire-brick slabs becomes heated, and is carried in a wooden trunk between the ceiling of the lower apartment and the floor above, and admitted into each room at the upper edge of the skirting. These hot air flues between the fire-places terminate at the level of the second floor, but the tunnels are continued upwards to the chimney tops, to serve as exhausting flues for the ventilation of the apartments, small wooden trunks being carried from an opening in the centre of each ceiling to join them. These openings are furnished with flaps of light oiled silk, opening upwards. Bricks moulded so as to form such flues as those described, without interfering with the bond, can now be obtained at about the same price as the patent compressed brick.”

The surfaces of broken ground which occur in Liverpool (and not only there) have proved a source of disease: pieces of land intended to be laid out for building purposes have had the brick earth excavated, or foundations dug for. In these pools of stagnant water lie, and poison the atmosphere around. The simplest remedy is of course to fill up the holes, and level the surface so that no water would lie upon it.

After some useful remarks on the construction of *baths*, the writer says,—

“In establishments of this kind, where, as an inducement to the practice of bathing, the charge should be fixed at a minimum price, it is obviously necessary to obtain as much accommodation at as cheap a rate as possible. Let all the money, therefore, be spent in interior arrangement, and let external decoration be a secondary consideration. Let the building look like the purpose and the people, and a truer principle will be developed than by disguising a working man’s bath under the semblance of a Greek temple, or a Gothic palace.”

There was little occasion to say, “let external decoration be a secondary consideration.” Let the building “look like the purpose and the people,” if you please, and we have no desire to see it “under the semblance of a Greek temple or a Gothic palace;” but let it be a municipal structure worthy a great people, well proportioned, fitting, and noble; calculated to elevate the feelings, and increase the self-respect of the community at large,—its owners!

Amongst other works, bearing on the health question, now on our table, is the “Ninth Report of the Registrar General of births, deaths, and marriages,” a startling document, calculated to awaken thought in the most unreflecting. It shews, as touching the important town to which we have been referring and Manchester, that the population of the seven Welsh districts was 273,000, the deaths in the last quarter 1,465; the population of Manchester and Salford 263,000, the deaths 3,149! That the population of the six districts of the South-Eastern division was 215,000, and that the deaths in the last quarter (ending September 30) were 1,458, while the population of Liverpool was 223,000, the deaths in the same quarter 2,946!! The causes of this fearful sacrifice are shewn to be remediable.

A former report set forth, amongst other results, that while the annual deaths in the town districts of Manchester to 1,000 males living are 37, in the extra-metropolitan parts

\* The writer takes occasion to remark that “flush” is now generally incorrectly written “flush.” Flush has amongst its meanings, “to pour in, to overflow, to dash with violence;” but *flush*, substantive, a body of water driven by violence; and to *flush*, verb, to strike up large bodies of water, to discharge water suddenly,—are doubtless the right words.